4. Education Curriculum – Black Canyon of the Gunnison National Park (www.oneplaneteducation.com)



What Is a Wilderness Area?

Teacher Activity Page

[Standards] [Related Hot Links] [Teacher Page] [Student Page] [PDF File]

Background:

A wilderness is a living storehouse for a great diversity of plant and animal life. It is also a living laboratory where scientists can observe the world in its natural state. This activity concentrates on wilderness concepts and gives students an overview of what designates an area to be a National Wilderness such as the Black Canyon.

Objectives:

In this activity students will:

- · Learn the definition of what makes an area a wilderness.
- · Learn about wilderness legislation.
- Learn about wilderness management.
- Learn about wilderness policies.
- · Discover the locations of designated wilderness areas in the United States.

Resources/Materials/Supplies

Internet access to: Web site: National Wilderness Preservation System http://www.wilderness.net/nwps/

All of the four parts of this series relate to this activity, but Part One has the most emphasis.

Directions:

Part One:

This activity primarily explores the web site: National Wilderness Preservation System (see above address.) Become familiar with this site prior to introducing it to the students.

- · Introduce the activity with engagement questions such as:
- · How many of you have been to a wilderness?
- · Where do you think the closest one is to your home?
- What makes a wilderness unique and different from other areas?
- How do agencies such as the National park Service manage and protect wilderness areas?
- What are the pros and cons to having wilderness areas?

Demonstrate and tour through the web site: National Wilderness Preservation System.

In pairs or small groups assign this site into five teams:

- · What is a Wilderness
- Wilderness Legislation
- Wilderness Management
- Wilderness Policy
- . The Wilderness Information Network

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and direct the student/teams to explore each link in these sections.

Have the teams report out their significant findings. You may want to create a report form for this or let the students write in their journals or logbook.

At the end of this activity make sure the class identifies the closest wilderness areas to their homes.

Part Two

As a whole class explore the features of one or two wilderness areas in close proximity to your home (as identified in Part One)

Using the information gained in Part One identify why this area qualifies as a wilderness are and what policies and management practices are in place to protect the site(s)

Management Tips and Hints:

This is a self-paced activity and your knowledge of the site in advance will make it easier to help students as they explore the web sites.



WELCOME

WHAT IS THE BWCA WILDERNESS KIT?

This curriculum is a joint project of the Boundary Waters Wilderness Foundation and the United States Forest Service-Superior National Forest. The Kit is designed to teach about the uniqueness and complexities of wilderness, specifically the Boundary Waters Canoe Area Wilderness (BWCAW). Located along the Minnesota-Canadian border, this pristine land has been set aside as a national treasure. It is rich in natural, historical, and cultural value, and is one of the most heavily used wilderness areas in the country. In order for the BWCAW to continue to exist in its naturally balanced state, modern visitors need to be aware of this delicate and unique area, and understand how people played and continue to play a role in managing and protecting the wilderness.

WHO CAN USE THE BWCA WILDERNESS KIT?

Teachers, educators, facilitators, youth group leaders, church group leaders, and others are the intended users. You do not need to be a wilderness "expert" to teach these units effectively. The BWCA Wilderness Kit is created for both formal and non-formal educators. The units and activities are aimed at middle school grade levels (5-8) for approximately 5-30 participants. However, each lesson is flexible enough to tailor the content to a younger or older audience.

HOW DO I USE THE BWCA WILDERNESS KIT?

The BWCA Wilderness Kit contains five units. Each can be used independently, to focus on a particular topic, or used sequentially. The time frame for one unit is approximately 50 minutes but can vary depending on the individual class or group. Time guidelines are given in each unit and exist merely as suggestions. Feel free to extend or shorten an activity as it is appropriate with a particular group. All materials, props and game pieces are included in the Kit. Some activities require photocopying prior to teaching the unit. The BWCA Wilderness Kit may be used in a classroom or gathering space. Rooms with moveable desks and chairs or large open spaces are preferred.

We are excited that you have chosen this curriculum. It is an engaging and educational compilation of units focusing on the Boundary Waters Canoe Area Wilderness (BWCAW) in northern Minnesota.

We hope that you enjoy using this curriculum. As with any educational material, this Kit is dynamic. We encourage you and your group to send us comments and suggestions explaining how this Kit was effective or how it could be improved.

Thank you for using the BWCA Wilderness Kit. By increasing awareness and training people to use the wilderness responsibly, we hope to ensure the continued presence of the BWCAW and its availability for decades to come.



WELCOME

FOR MORE INFORMATION:

The BWCA Wilderness Kit was jointly produced by the Boundary Waters Wilderness Foundation and the United States Forest Service-Superior National Forest. Both are available to answer questions regarding content, instruction, and materials of the kit.

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The BWCA Wilderness Kit is carefully designed to include a variety of teaching methods to increase a participant's motivation as well as to affect the learning atmosphere. We recognize that all people learn differently. Consequently we have tried to create a curriculum that presents materials in multiple ways. Be prepared for a high level of activity, movement and discussion in each unit.

WHEN DO I USE THE BWCA WILDERNESS KIT?

Wilderness is an interdisciplinary topic; the Kit is not limited to science or environmental education teachers. Use the Kit to complement a unit on forests, Minnesota history, ecology, nature writing, federal legislation, or before you lead a trip to the BWCAW. Look through the "Skills," "Concepts," and "Objectives" sections of each unit to determine when each particular unit would best fit into your class or group schedule.

WHO FUNDED AND CREATED THE BWCA WILDERNESS KIT?

The Kit was developed in 1994 with grants from the Boundary Waters Wilderness Foundation, Superior National Forest, Dell Trust Fund, and the Boundary Waters Education Consortium. Additional funding was provided through grants from the WM Foundation and REI.

Original authors include: Julie Madsen Bates; Tim Bates; Ken Gilbertson; Katharine Johnson; Lisa Mostrom; and Sally Rauschenfels. Original contributors include: Carrie Anderson; Ellen Hawkins; Rachel Hefte; Peter Mostrom; and Maria Thompson.

The Kit's curriculum was revised in 2002 by Julie Flotten and its appearance redesigned by Don Farleo Advertising and Design Company. Contributors include: Christina Boston; Mary Hanney; Ellen Hawkins; Melissa Lindsay; Kris Reichenbach; Sarah Strommen; and Sean Wherley.

Thanks is extended to Mark Stensaas for permission to use illustrations from Canoe Country Wildlife and Canoe Country Flora.



OVERVIEW OF EACH UNIT

UNIT ONE: WHAT IS WILDERNESS?

This unit focuses on what makes a place a "wilderness." Participants discuss or vote on what particular objects, sounds, and images belong in a wilderness. They are introduced to the National Wilderness Preservation System and the Wilderness Act of 1964. Participants then determine how the Boundary Waters Canoe Area Wilderness fits into the criteria of a federally-designated wilderness area.

UNIT TWO: HOW DIVERSE IS BIODIVERSE?

This unit explores the concept of ecosystems. Using teams, participants decide what species survive and thrive in the five ecosystems of the BWCAW. Participants combine their ideas and analyze patterns they notice. The final discussion relates these connections to the importance of diversity within an ecosystem.

UNIT THREE: THE CHANGING FOREST

This unit concentrates on how forests in the BWCAW change over time. Through role-playing and games, participants learn the idea of forest succession and the importance of different disturbances impacting a forest.

UNIT FOUR: PEOPLE OF THE BOUNDARY WATERS

Participants form teams to become "experts" on a particular user group of the Boundary Waters: the Ojibwe; the Voyageur; the Logger; and the Modern Visitor. Teams learn about their specific character's use of, and impact on, the Boundary Waters. Participants then "test" their knowledge in the Paddler's Game!

UNIT FIVE: LEAVE NO TRACE

Participants learn how their actions and choices can impact the wilderness as they take an imaginary trip to the BWCAW. After discussing high and low impact choices, participants apply and categorize their decisions in relation to the seven Leave No Trace principles.











THE BWCA WILDERNESS KIT

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ANATOMY OF A UNIT







CONCEPTS AND KEY IDEAS:

The main concepts and key ideas presented in each unit.

GOALS:

The knowledge participants will attain upon completion of the unit.

SKILLS

A list of skills the participants use to complete the unit.

MATERIALS NEEDED:

A list of the materials the instructor will need in order to teach the unit and each activity. Some materials may need to be copied prior to teaching. You may make copies from the master in the manual or by using the electronic files on the CD provided.

BACKGROUND:

Information provided for the instructor in order to become familiar with the content before teaching the unit.

PREPARATION AND INTRODUCTION:

Outlines the materials and steps necessary to prepare the classroom or area for teaching the unit. Also, outlines discussion questions to use to introduce participants to the unit topic.

SIDEBARS:

Facts for the instructor to share during the unit, tips for teaching the unit, helpful definitions, further background information.

ACTIVITIES:

Explanations and instructions for conducting games and discussions. Each activity correlates to the unit concepts and key ideas. Each activity includes specific activity objectives, instructions and a suggested time frame. These time suggestions represent the optimum amount of time to make a particular activity most effective.



ANATOMY OF A UNIT

OBJECTIVES:

The tasks participants will accomplish by the end of the activity.

INSTRUCTIONS:

Rules and directions for completing the activity.

UNIT CLOSING:

A review of concepts introduced in unit activities. Concepts are then applied to answer related questions.

WILDERNESS PASSPORT:

An activity or activities that assess what the participants have learned during the unit. You can copy the Passport for each participant or simply write the questions on a chalkboard or piece of paper. A stamp for each unit is included in the materials. Stamp each participant's passport when he or she has completed the question or activity. The time it takes to complete the Passport is NOT included in the 50 minutes allocated for the unit. It is important to take the time to complete the Passport either as homework or as a follow up to the unit. These questions and/or activities reinforce the concepts taught during the unit. The Passport is designed to be assembled with the cover sheet (found in appendix) upon completion of all units.

EXTENSIONS:

Activities or projects to extend the topics covered in the unit. It is strongly recommended that classes or groups complete one or more of these extensions.

Each extensions list begins with a reference to the Arthur Carhart
National Wilderness Training Center's "Wilderness and Land Ethic
Curriculum." This is a national wilderness curriculum developed jointly
by the USDA Forest Service, Bureau of Land Management, National
Park Service and U.S. Fish and Wildlife Service, the four agencies
responsible for the management of the National Wilderness Preservation
System. The Wilderness Box and Land Ethic Curriculum is an excellent





THE BWCA WILDERNESS KIT

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ANATOMY OF A UNIT







source of additional background information and lessons for people who use the BWCA Wilderness Kit.

MINNESOTA GRADUATION STANDARDS:

Indicates which specific Minnesota Graduation Standards correlate to each unit as they apply to Middle School Grades 5-8.

ADDITIONAL INFORMATION & RESOURCES:

A list of places to go for more information on the topic covered in each lesson. We apologize if some of the website links are missing or broken; they were updated in November 2002.

FUN FACTS:

Tidbits of information that are fun to share with participants. These will appear throughout the unit.

Sample Educational and Interpretive Programs and Products

THE BWCA WILDERNESS KIT

Lesson Plan and Materials







UNIT ONE: WHAT IS WILDERNESS?

OVERVIEW

GRADES: 5-8

AGES: 11-14

TIME: 50 minutes

MATERIALS NEEDED:

- Vote With Your Feet items and images
- Instructor Reference Sheet:
 Vote With Your Feet
 Object, Image and Sound
 Identification Sheet
- Tape/CD player and Vote With Your Feet Sounds tape/CD
- Belongs in Wilderness, Does Not Belong in Wilderness signs
- National Wilderness Preservation System Map
- Instructor Reference Sheet: Wilderness Act Primer Cards
- 7. Wilderness Act Primer Cards (9)
- 8. Map of BWCAW
- Instructor Reference Sheet: Wilderness Act of 1964 Excerpts
- 10. Instructor Reference Sheet: What is the BWCAW?
- Unit One Wilderness
 Passport (master in manual or on CD, make copies as needed)
- Unit One Wilderness
 Passport stamp and ink pad

CONCEPTS AND KEY IDEAS:

- The idea of wilderness varies from individual to individual, across cultures, and over time, and may incorporate physical, spiritual, recreational, and economic elements.
- 2. The Wilderness Act, which established the National Wilderness Preservation System, provides a common definition of wilderness that serves to protect and to conserve wilderness areas and their scientific, watershed, life support systems, historic and cultural, spiritual, aesthetic, recreation, refuge, and educational values.

COALS

- Participants will be able to give a personal definition of wilderness and understand that the idea of wilderness varies from individual to individual.
- Participants will be able to describe in their own words the purpose and main components of the Wilderness Act of 1964.
- Participants will be able to identify the Boundary Waters Canoe Area Wilderness as part of the National Wilderness Preservation System and describe some of its unique characteristics.

SKILLS:

- Brainstorming in a large group
- 2. Identifying pictures, objects and sounds
- 3. Decision-making
- 4. Defending an opinion
- Reading and listening comprehension
- Drawing conclusions
- Communicating

UNIT ONE: WHAT IS WILDERNESS?



BACKGROUND (1 OF 4)

Cultures and groups of people understand wilderness in different ways. Some cultures, which live in proximity to or in balance with wilderness, have no word for "wilderness" in their vocabulary. The Puritans in early America viewed wilderness as an evil place to be conquered and tamed. In our society today, the word "wilderness" evokes different images in each person's mind. So what exactly is wilderness?

In order to answer this question it is important to remember that wilderness is a concept created by cultures which did not live in balance with, or were at odds with with, wilderness. Five hundred years ago, before European settlement, the North American continent was a vast tract of wild, undeveloped land and water occupied only by Native Americans. European settlers, however, significantly changed wild lands. The "New World" of North America became divided between the "wild" and that which was "tamed" or part of civilization. As the European settlers moved across the continent, more and more land was "tamed" for agriculture, livestock, and homes.

Today, the balance has shifted dramatically. A continent that was once completely wild land is now almost entirely developed and controlled by people. As less and less wild land remained people began to value it more. The remaining wild lands or "wilderness" areas were no longer seen as an evil to be fought and conquered, but rather as a valued resource to preserve for future generations. Americans realized that most of the land in this country had been developed through agriculture, homes, forestry, mining, grazing and other activities. In order to protect and preserve these remaining wilderness areas, there needed to be a generally accepted definition of wilderness and a mechanism for protecting them.

On September 3, 1964, the Wilderness Act was signed into law. The Wilderness Act provided a legal definition of wilderness, created the National Wilderness Preservation System, established a process to be used for designating wilderness areas, and set provisions for the use of

THE WILDERNESS ACT

The Wilderness Act was enacted in 1964 to protect some of the remaining areas in the U.S. that had not been restructured or changed dramatically by humans. The Act established a common definition of "wilderness," enabling managing agencies such as the Forest Service, National Park Service, U.S. Fish and Wildlife Service, and Bureau of Land Management to base management practices on recognized criteria. For the complete text of the act, see the appendix.



UNIT ONE: WHAT IS WILDERNESS?

BACKGROUND (2 OF 4)



THE LANGUAGE OF WILDERNESS

Looking at the root of the word wilderness, it is easy to see how different. cultures perceive wilderness. "Wilderness" is based in the Germanic/Norse languages and comes from the root "will and "wild" meaning self-willed, uncontrollable, disordered, and confused. In Old Swedish "wild" means "boiling water." The Old English definition of "wildeor" is a place of wild beasts. Wilderness in Spanish is "falta da cultura," literally "lack of civilization," and in Italian, wilderness is "scene di disordine o confusione," fairly self-explanatory.

wilderness areas. The intent of the Wilderness Act was to establish wilderness areas "for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness..." Legal wilderness, "in contrast with those areas where man and his own works dominate the landscape," is "recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain."

In order to comprehend the concept of wilderness, it is important to understand the many values of wilderness. While most people are familiar with the common recreational values of wilderness there are also other non-recreational values of wilderness.

One value of wilderness is the life support value of wilderness.

Wilderness protects watersheds and plays an important role in oxygen production, carbon dioxide absorption, soil building, biomass decomposition, insect regulation, and pollution scrubbing. Wilderness can be used as a benchmark to show what an ecosystem undisturbed by humans looks like. This will help us learn to better intertwine ourselves within the biological systems in which we exist. These areas can also serve as gene banks and a place for natural evolutionary processes to continue.

Related to this life support value is the scientific value held in wilderness. Wilderness is a natural lab in which we can study natural processes. Society can benefit from this scientific research as it enlarges our understanding of the world and our roles in it. If we were to destroy all wilderness it would be like burning an unread book. Research may lead to yet undiscovered knowledge and uses of resources found in wilderness.

Wilderness also holds educational value and training value for schools and universities. It is an important classroom for learning outdoor skills such as orienteering, survival, mountaineering and stock packing. It can be used by outdoor education programs to teach about natural processes. It is also the source of material for many magazine articles and television

UNIT ONE: WHAT IS WILDERNESS?



BACKGROUND (3 OF 4)

shows about plants and animals. Many people enjoy wilderness vicariously through these kinds of media.

For many, wilderness is much more than just a place to soak in the scenery. Its aesthetic value is appreciated through intimate contact with the environment and can be sublime, awesome and majestic. It is a place where people can experience sights, sounds and feelings they are unable to experience in other less natural settings. People, some of whom may never actually visit a wilderness area, also enjoy the aesthetic value of wilderness vicariously through items such as posters, calendars, and books.

For some, wilderness also holds philosophical and religious value and is a sacred place. To them wilderness is a place with natural cathedrals where people can celebrate the creative forces behind life. It is a place where we can better understand unity and continuity. Wilderness is spiritually sustaining and has spiritual cleansing powers for some.

A value of wilderness that is more difficult to understand is its intrinsic value. This value hypothesizes that non-human organisms have a place on earth and that even inanimate objects have the right to exist. This value confers that all value does not originate with humans and that plants, animals, inanimate objects and the ecosystems that they inhabit, have rights of their own whether or not humans assign that value.

The National Wilderness Preservation System continues to grow every year from the original 9.1 million acres established by the 1964 Wilderness Act. Since 1964, Congress has passed scores of laws adding hundreds of areas and over 100 million acres to the National Wilderness Preservation System. In 2002, there were 644 individual wilderness areas totaling 105,778,352 acres. Alaska contains 58,182,216 acres, which is about 56 percent of all wilderness in the United States. About 4.4 percent of the continental United States is protected as federal Wilderness. Four federal agencies manage designated Wilderness in the United States: the National Park Service, the Forest Service, the Bureau of Land

FUN FACTS:

- U.S. Senator Hubert Humphrey of Minnesota and nine other Senators introduced the first wilderness bill in 1966.
- The Wilderness Act was signed on September 3, 1964 by President Lyndon Johnson.
- It took 8 years, 18 hearings and 66 versions of the wilderness bill before Congress passed the final version.

THE BWCA WILDERNESS KIT

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UNIT ONE: WHAT IS WILDERNESS?

BACKGROUND (4 OF 4)

Management and the Fish and Wildlife Service. Wilderness is one layer of protection placed on top of the original federal land designation.

So, while people have an individual perception and understanding of wilderness, the Wilderness Act provided a legal definition for federally-designated wilderness. Other non-federal lands, such as those owned by states or land trust organizations, may also be called wilderness but may not have the same features, criteria, and resource values as used in defining federal wilderness areas. When discussing wilderness it is important to differentiate how it is defined by individuals, non-federal land managers, and federal legislation.